

Development of a Synchronized Emergency Operations Plan for a Terrorist Chemical Detection System at the Anaheim Convention Center



Convention centers, stadiums, and arenas are an attractive target for those who seek to inflict significant harm to the Nation's public image and also to the entertainment industry. To address this potential threat, the U.S. Department of Homeland Security's Science and Technology Directorate (S&T), as a part of the Regional Technology Integration Initiative, has embarked on placing a chemical detection system in the Anaheim Convention Center (ACC). This system will serve as a design and implementation template for use in other public entertainment venues.

Anaheim Convention Center

The ACC contains more than 1 million square feet of exhibition space that can accommodate up to 1,600 exhibitors. It has over 40 conference rooms that can accommodate more than 88,000 patrons; an adjoining arena holds 5,000 visitors. S&T requested assistance from Argonne National Laboratory in devising an emergency operations plan that (1) reflects the capabilities of the ACC in a response mode, (2) is coordinated with the city and county response community, and (3) employs the best practices and lessons learned from Argonne's experience

with PROTECT, the U.S. Army's Chemical Stockpile Emergency Preparedness Program, and the Federal Emergency Management Agency's Urban Areas Security Initiative.

Argonne's Solution

Argonne worked with the ACC and the Anaheim responder community to develop an emergency operations plan that gives procedures for managing major emergencies and disasters that could threaten the health and safety of ACC employees, show-business personnel, vendors, visitors,

and responders, or disrupt ACC activities and destroy or incapacitate property. The plan provides a management structure and identifies persons with direct roles and responsibilities for an emergency response and critical support services during incidents of varying type and scope. The ACC conducts continuous planning; cooperates and coordinates with the first responder community and all levels of government charged with disaster response and control; and seeks to develop a flexible, scalable, coordinated response that would accommodate contingencies of all types, magnitudes, and duration.

State-of-the-Art Chemical Detection System

To address the installation and operation of both a stateof-the-art terrorist chemical detection system and a command-and-control system, Argonne scientists and engineers from the Decision and Information Sciences Division's Center for Integrated Emergency Planning and Argonne's Infrastructure Assurance Center developed and trained over 100 ACC staff on the 10-33 Orange Standing Operating Procedures to provide a detailed set of specific, standardized tasks with appropriate roles and responsibilities related to emergencies and disasters involving the release of a chemical agent. These tasks are to be performed to ensure a high level of quality and consistency by ACC operations personnel in their efforts to assess and control chemical hazards; put into place unique prevention and protection activities; select and implement protective actions; ensure that the public is warned; execute short-term protective actions; and implement recovery in concert with local, State, and Federal responding departments and agencies.

Collaborative Effort

Patrick Wilkey and William Metz at Argonne National Laboratory collaborated with researchers at the Massachusetts Institute of Technology, John Hopkins University, and 4Dscape.

Reference: *Anaheim Convention Center Emergency Operations Plan*, 2009.

Chemical Threat Decision Model



This model continually protects up to 90,000 Anaheim Convention Center patrons.